

EDITORIAL**Methods for setting priorities in systematic reviews**

Development and assessment of methods for setting priorities for systematic reviews is developing into a field of increasing interest amongst such groups as the AHRQ and NICE [1,2]. The Cochrane Collaboration has recently established a new Methods group entitled the “Cochrane Agenda and Priority Setting Methods Group” to develop methodology and advise The Cochrane Collaboration on how the validity and precision of systematic reviews can be improved. Over the last several years, the Cochrane Collaboration has recognized the need for a more accountable and systematic approach to selecting research questions for systematic reviews. When the Cochrane Collaboration was established 20 years ago (the 20th year celebration will take place at the Quebec City Cochrane Colloquium in September of this year) the topic selection was ‘expert/investigator-driven,’ in that the authors conducted systematic reviews on topics they were interested in. The enthusiasm of these expert authors was one reason the Cochrane Collaboration has been so successful, with the over 4000 systematic reviews in the Cochrane Library. However, a more systematic approach is needed to address gaps of importance to patients, practitioners, and policymakers. The Collaboration recognized this and in 2007, they established a one-off initiative entitled the “Prioritization Fund,” which would suggest mechanisms for improving the relevance of Cochrane Reviews. In this month’s issue of the *Journal of Clinical Epidemiology*, we have some of the products of this initiative. Following two commentaries on the importance of prioritizing systematic review questions, there are six reviews and original articles that report the results of several of the Prioritization Fund projects.

The purpose of the first study in the series was to assess the presence and effectiveness of existing systems of prioritization for Cochrane review topics and to explore methods of improving those systems. Nasser et al found that only 29 of the 66 Cochrane groups surveyed had a prioritization system in place for reviews, some of which were more detailed than others. This is accompanied by an increasing interest in moving from a totally ‘push model,’ where authors write about what they are interested in, toward an ‘exchange model’ where the user, whether patient, practitioner, or policymaker, provide information on the gaps where systematic reviews are needed. They urge that all Cochrane entities should have strategic plans to improve the inclusiveness and transparency of their own prioritization processes and make more effective use of feedback from end

users to increase the likelihood of producing reviews that have positive effects on health outcomes. Buckley et al assessed the effect of a research prioritization partnership between clinicians and patients with urinary incontinence. A partnership of eight patient and 13 clinician organizations identified and prioritized gaps in the evidence that affect everyday decisions about treatment. Their top priorities were published and reported to research funders. They reported that a year later there were 19 products (primary studies, systematic reviews) under consideration by a national research commissioning body. Thus, prioritization through patient-clinician consensus can be effective in informing the development of clinically useful research.

Priority setting needs to be collaborative: Handoll et al demonstrated the feasibility and potential benefits of a structured collaboration between a Cochrane Review Group (specialist-area group responsible for producing Cochrane reviews) and Cochrane Fields (broad-spectrum interest groups) for the identification and production of Cochrane reviews on priority topics. Clavisi et al present the Global Evidence Mapping multistep multi-method approach for identifying priority research areas; this involves multiple stakeholders in an initial scoping meeting and preliminary literature search, followed by a facilitated mapping workshop and an online survey. Jaramillo et al extended this Global Evidence Mapping priority setting approach to incorporate health equity and the social determinants of health, and showed the utility for patients and practitioners in developing priorities and refining these into ‘PICO’ questions suitable for a systematic review on interventions for osteoarthritis. Nasser et al report on the development and pilot of an equity lens checklist that could help researchers in developing a more equity-oriented approach toward priority setting and agenda setting in systematic reviews.

A variant of this priority setting for systematic reviews is to use systematic reviews to identify research needs for primary studies (both randomized controlled trials [RCTs] and observational) [3]. In the latest in articles from the AHRQ program, Saldanha et al developed and pilot tested a process to identify needs for primary clinical research using a systematic review in gestational diabetes mellitus. In the accompanying commentary, Nasser and Welch argue for more valuation of such approaches and stress the importance of patients being part of the stakeholder group.

Turning to other papers in this issue: Selective reporting in trial reports and systematic reviews is attracting ongoing attention so systematic approaches to this are needed. The review by Page et al catalogue the ways in which selective inclusion and reporting bias can occur in RCTs and systematic reviews. They found numerous examples of scenarios in which multiple outcomes or multiple data for the same outcome are available, yet only a subset is included or reported; outcome data are reported with inadequate detail; or outcome data are given different prominence through its placement across or within reports. They propose eight categories each for the following three bias types: selective reporting in RCTs, selective inclusion in systematic reviews, and selective reporting in systematic reviews. They posit that increasing trialists' and systematic reviewers' awareness of these examples may minimize their occurrence.

Two papers on patient-reported instruments bring out different methodological issues. 'Sensibility' is not a common term nowadays, although it was proposed as a term to cover face/content validity and feasibility by Alvan Feinstein, a former editor of this Journal in 1987 in his seminal text "Clinimetrics"[4]. He used it to emphasize that these aspects of clinical importance are as important as statistical significance that is prominent in psychometric-based assessments. In their article in this issue, Tang et al have operationalized sensibility as the following four components: comprehensiveness, understandability, length, and suitability of response options as the framework with which to examine and compare the sensibility attributes (face/content validity and feasibility) of five at-work productivity measures from the perspective of patients with osteoarthritis (OA) or rheumatoid arthritis (RA). They found unique strengths and limitations of the competing five at-work productivity measures across the different sensibility criteria. The second patient-reported outcome paper, by Wong et al, addresses the ongoing debate and choice of generic versus disease-specific patient-reported outcome instruments. They sought to examine the responsiveness of generic and condition-specific instruments based on the anchor of self-reported level of global change in patients with colorectal cancer. The authors found that condition-specific measures were more responsive than all generic

subscales, with the exception of the social domain. The authors recommend that complementary use of condition-specific and generic instruments to evaluate the health-related quality of life of colorectal cancer patients should be encouraged.

Gold-standard versus silver (surrogate) standards in diagnostic test assessments: Kang et al present evidence to show that evaluating new diagnostic tests presents a challenge if the conventional "gold" standard is invasive, hazardous, or expensive, especially if that test has been supplanted in usual clinical practice by a "silver" standard test that is more acceptable and perhaps only slightly sub-optimal. They showed that methods ignoring the difference in reference tests severely underestimated sensitivity and specificity under the assumption of conditional independence. They propose modern Bayesian methods to solve this.

Lastly, in a novel study of a 'hard-to-reach' population of ex-prisoners, David et al sought to identify determinants of attrition to determine attrition prevention strategies. They found a dose–response effect of the number of telephone contacts in reducing attrition.

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